

AN 119:237906 HCA Full-text  
 TI Electrostatographic liquid developer  
 IN Kato, Eiichi  
 PA Fuji Photo Film Co., Ltd., Japan  
 SO Jpn. Kokai Tokkyo Koho, 96 pp.  
 CODEN: JKXXAF  
 DT Patent  
 LA Japanese  
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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PI	JP 04288558	A2	19921013	JP 1991-77109	19910318
	JP 2916546	B2	19990705		
PRAI	JP 1991-77109		19910318		

AB The title electrostatog. liquid developers is a dispersion of resin particles in a nonaq. solvent of elec. resistivity  $\geq 10^9 \Omega \cdot \text{cm}$  and dielec. constant  $\leq 3.5$ ; the resin particles being obtained by polymerizing a solution of a monofunctional monomer (A), a polyfunctional monomer (D), and a dispersion-stabilizing resin(s) in a nonaq. solvent. The dispersion-stabilizing resin is a graft copolymer obtained by polymerizing a monofunctional macromonomer with  $\text{CHb1:Cbl(X2-Y2)}$  [ $\text{X2} = \text{CO}_2, \text{OCO}, (\text{CH}_2)_y\text{OCO}, (\text{NH}_2)_y\text{CO}_2$  ( $y = 1-3$ ),  $\text{O}$ ;  $\text{Y2} = \text{C} \geq 8$  aliphatic;  $\text{b1}, \text{b2} = \text{H}, \text{halo}, \text{C1-6 hydrocarbon moiety}$ ]. The above macromonomer (weight average mol. weight  $1 + 10^3 \cdot 2 + 10^4$ ) is an A-B block copolymer having (1) an A block based on  $\geq 1$  polar groups containing polymer component and (or) a polymer component similar to monomer (A) above, and a B block based on  $[\text{CHa1Ca2(X1-Y1)}]$  [ $\text{X1} = \text{CO}_2, \text{OCO}, (\text{CH}_2)_x\text{OCO}, (\text{CH}_2)_x\text{CO}_2$  ( $x = 1-3$ ),  $\text{O}, \text{SO}_2, \text{CO}$ , etc.;  $\text{Y1} = \text{hydrocarbon group}$ ;  $\text{a1}, \text{a2} = \text{H}, \text{halo}, \text{CN}, \text{C1-8 hydrocarbon}, \text{CO}_2\text{Z1}, \text{CO}_2\text{Z1}$  interposed by  $\text{C1-8 hydrocarbon moiety}$ , ( $\text{Z1} = \text{H}, \text{C1-22 hydrocarbon}$ )] with a C-C double bond terminating the B block. The developer shows good dispersion stability, and good redispersibility and fixing properties, and is useful in electrophotog. lithog. platemaking.

IC ICM G03G009-13

CC 74-3 (Radiation Chemistry, Photochemistry, and Photographic and Other

Reprographic Processes)

ST electrophotog liq developer resin dispersion; acrylic resin electrophotog

liq developer

IT Acrylic polymers, uses

RL: USES (Uses)

(electrophotog. liquid toner using)

IT Electrophotographic developers

(toners, liquid, preparation of)

IT 9082-26-2, Divinylbenzene-styrene-vinyl acetate copolymer 58698-55-8

73784-91-5 100942-95-8 122083-53-8 150997-12-9 150997-13-0

150997-14-1 150997-15-2  
 RL: USES (Uses)  
 (latex from, for liquid electrostatog. developer)  
 IT 25951-78-4, Divinyl adipate-vinyl acetate copolymer 27015-60-7,  
 Ethylene  
 glycol dimethacrylate-vinyl acetate copolymer 30285-39-3 61509-  
 38-4,  
 Divinylbenzene-vinyl acetate copolymer 62477-55-8 89761-87-5  
 150344-27-7 150344-28-8 150344-29-9 150344-30-2 150469-17-3  
 RL: USES (Uses)  
 (latex particles from, for lithog. liquid electrostatog.  
 developer)  
 IT 139598-53-1P, Ethylmethacrylate-methacrylic acid-  
 octadecylmethacrylate  
 block graft copolymer 139598-54-2P 139598-55-3P 139598-56-4P  
 139598-57-5P 139598-58-6P 139598-59-7P 139598-60-0P 139598-  
 61-1P  
 139598-62-2P 139598-63-3P 139598-64-4P 139598-65-5P 139598-  
 66-6P  
 139598-68-8P 139598-69-9P 139598-70-2P 139598-71-3P 139598-  
 72-4P  
 139598-75-7P 139598-76-8P 139598-77-9P 139598-79-1P 139598-  
 80-4P  
 139598-81-5P 139598-82-6P 139598-83-7P 139598-85-9P 139687-  
 39-1P  
 147045-28-1P 147067-02-5P 147127-63-7P 150958-17-1P  
 150958-19-3P  
 RL: TEM (Technical or engineered material use); PREP (Preparation);  
 USES  
 (Uses)  
 (preparation of, as dispersion-stabilizing resin)  
 IT 138115-34-1DP, Ethylmethacrylate-triphenylmethylethylmethacrylate block  
 copolymer, carboxylation product, ester with 2-hydroxyethyl  
 methacrylate,  
 hydrolysis product 138232-67-4DP, Benzylmethacrylate-  
 butylmethacrylate  
 block copolymer, reaction product with 4-bromomethylstyrene,  
 reduction product  
 139357-83-8DP, reaction product with ethylene oxide, ester with  
 methacrylic acid, hydrolysis product 139598-52-0DP, Acrylic  
 acid-octadecylmethacrylate block copolymer, hydroxy-terminated,  
 reaction  
 product with 2-isocyanatoethylmethacrylate 150958-16-0DP, reaction  
 product with 4-bromomethylstyrene, hydrolysis product  
 RL: PREP (Preparation)  
 (preparation of, as macromonomer)